

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A laser processing apparatus for irradiating a work piece with a laser beam to process the irradiated portion comprising:

a laser oscillator for generating said laser beam with a predetermined pulse;

an irradiation position control optical system for causing said laser beam to irradiate a predetermined position on said work piece;

a plurality of optical path systems for guiding the laser beam emitted from said laser oscillator to said irradiation position controlling optical system; and

a total reflection mirror as an optical path switch, which is capable of proceeding into and retracting from an optical path, for determining which optical path system is used, from said plurality of optical path systems,

wherein said plurality of optical path systems includes (1) at least a first optical path system that guides said laser beam emitted from said laser oscillator to said irradiation position control optical system without changing its energy distribution in the direction perpendicular to the optical axis of the laser beam and (2) a second optical path system that guides said laser beam emitted from said laser oscillator to said irradiation position control optical system while changing its energy distribution in the direction perpendicular to the optical axis of the laser beam, and

said total reflection mirror ~~proceeds~~ moves into and retracts from the optical path during an off-time of the laser beam in the predetermined pulse of said laser oscillator such that said total reflection mirror begins being driven for the moving into and retracting from the optical path when the predetermined pulse of said laser beam changes to an off-state, and driving of said total reflection mirror for the moving into and retracting from the optical path is completed before the predetermined pulse of said laser beam changes to an on-state.

Claim 2 (Currently Amended): A laser processing apparatus for irradiating a work piece with a laser beam to process the irradiated portion comprising:

a laser oscillator for generating said laser beam;

an irradiation position control optical system for causing said laser beam to irradiate a predetermined position on said work piece; and

a plurality of optical path systems for guiding the laser beam emitted from said laser oscillator to said irradiation position controlling optical system; and

a total reflection mirror as an optical path switch, which is capable of proceeding into and retracting from an optical path, for determining which optical path system is used, from said plurality of optical path systems,

wherein said plurality of optical path systems includes (1) at least a first optical path system that guides said laser beam emitted from said laser oscillator to said irradiation position control optical system without changing the energy intensity of the laser beam and (2) a second optical path system that changes the energy distribution in the direction perpendicular to the optical axis thereof by preventing a portion of the laser beam emitted from said laser oscillator from reaching said irradiation position control optical system, and

said total reflection mirror ~~proceeds~~ moves into and retracts from the optical path during an off-time of the laser beam in the predetermined pulse of said laser oscillator such that said total reflection mirror begins being driven for the moving into and retracting from the optical path when the predetermined pulse of said laser beam changes to an off-state, and driving of said total reflection mirror for the moving into and retracting from the optical path is completed before the predetermined pulse of said laser beam changes to an on-state.

Claims 3-4 (Canceled).

Claim 5 (Original): A laser processing apparatus according to claim 1 or 2, wherein the second optical path system that changes the energy distribution of said laser beam includes a mask that makes the energy distribution in the direction perpendicular to the optical axis of the laser beam substantially uniform.

Claim 6 (Original): A laser processing apparatus according to claim 5, wherein the second optical path system that changes the energy distribution of said laser beam includes a homogenizer that makes the energy distribution in the direction perpendicular to the optical axis of the laser beam substantially uniform.

Claim 7 (Currently Amended): A laser processing method for irradiating a work piece with a laser beam to process the irradiated portion, comprising:

a first processing irradiating a predetermined position on said work piece with a laser beam emitted from a laser oscillator without changing its energy distribution in the direction perpendicular to the optical axis of said laser beam;

a laser beam switching a laser beam to be used after completing said first processing step, from said laser beam that is not changed in its energy distribution to a laser beam that is formed by changing the energy distribution in the direction perpendicular to the optical axis, of the laser beam emitted from said laser oscillator, by ~~inserting~~ moving a total reflection mirror into and retracting said total reflection mirror from an optical path of said laser beam during an off-time of the laser beam in the predetermined pulse of said laser oscillator such that said total reflection mirror begins being driven for the moving into and retracting from the optical path when the predetermined pulse of said laser beam changes to an off-state, and

driving of said total reflection mirror for the moving into and retracting from the optical path is completed before the predetermined pulse of said laser beam changes to an on-state; and

a second processing performing irradiation with said laser beam that has been changed in the energy distribution onto said predetermined position on said work piece.

Claim 8 (Canceled).

Claim 9 (Original): A method according to claim 7, wherein the energy intensity distribution of said laser beam that has been changed in the energy distribution guided onto said work piece is made uniform.

Claim 10 (Canceled).